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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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In the Matter of

Creation of a new }
"Driver's Radio Service" }

To: The Commission

PETITION FOR RULEMAKING

In accordance with the Administrative Procedure Act and rules, Robert K. Leef hereby petitions the Federal Communications Commission to institute a rule making to amend the Commission's rules to allow a new "Driver's Radio Service" or to modify the Family Radio Service and/or General Mobile Radio Service to include a "Driver's Radio Service".

Mr. Leef is a member of REACT (Radio Emergency Associated Communications Teams) - a recipient of The President's Volunteer Action Award -, a licensed amateur operator (KB6DON), an American Red Cross disaster volunteer communicator, and a retired two-way radio business owner who has an on-going interest in seeing the communications needs of the public served.

I. THE PRESENT CONDITION

Just about everyone is interested in cars. It's only a short jump from automobile interest to transportation, and from there to communications. Historically, one has led to another in the development of our country. The Pony Express, telegraph, Henry Ford's invention, and our highway system are all connected. But has one aspect of the picture fallen behind by about 90 years?

Motorists come into contact with some form of communications every day. In the most simple way, it's the broadcast radio we listen to while driving. Besides this "one-way" radio - and possibly a mobile scanner - the vehicle may also be equipped with two-way radio such as business band, CB, amateur, GMRS, cellular, and maybe others.

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Each of these pieces of equipment is designed to establish contact with another unit like itself, and usually with a specific person at another location. Herein lies the problem. None of these mobile two-way communications devices connect with all other nearby vehicles on the road. Private airplanes communicate with each other, and so do most boats. Why don't cars?

Instead we use hand signals, flash the lights, or yell to try and convey important information to another driver. We travel along in our steel and plastic cells in a kind of frustrated solitary confinement, unable to talk to the person in the car right next to us!

In the 1970's we seemed to be headed in the right direction with CB. Sales were high. Approximately one out of every ten cars and trucks had that kind of radio, and it was growing. Many motorists could talk to each other, or just listen to what was going on around them if they preferred. Even General Motors was an active participant with CB. However, due to a number of reasons it never reached all vehicles and now is basically flat or even in decline in some areas.

II. THE NEED

As it is now, we're unable to communicate properly with almost all nearby drivers. Messages that might be passed include:

- a) A traffic problem ahead.
- b) Giving warning of a dangerous road condition (fog, etc.).
- c) Asking for help.
- d) Requesting directions.
- e) Advising the driver in front he has a tire going flat, or something else out of the ordinary.

We might even see a restoration of civility and courtesy between drivers.

III. THE DETAILS

If there is to be communication between all drivers, a two-way radio must be in all cars, and left on. Or, if left off, it must be automatically turned on and tuned to the "emergency and assistance" channel by receipt of a signal. The "advanced alert system" is already used in Europe. It sends out broadcast signals in the FM band that automatically turn on car radios to inform drivers of road hazards. Technology from this, and possibly our own commercial sources would undoubtedly lead to a "smart" two-way radio.

Such a radio would not be a costly car accessory. One source estimates less than \$100, and with an adapter it could use the car's existing AM/FM antenna. Would there be a big sales loss for CB marketers? Probably not. These companies could contract with the automakers to supply their assembly lines with this new concept radio as a required factory-installed item. Either coming as standard equipment in new cars or available in aftermarket for existing vehicles through electronics retailers, public safety and convenience would be enhanced significantly.

This past winter there were numerous cases of motorists trapped in deep snow, and unable to summon help. This and other kinds of weather-related emergencies happen every year. Not everyone wants or can afford a cellular telephone, and CB is not dependable. No product has focused on the universal need of a required common communications device.

This new kind of two-way wouldn't have to be a replacement for CB. Some drivers, and many truckers, still need or want the capability of talking longer distance. And, beyond this - for 50 to 75 mile range - another choice still remaining would be the General Mobile Radio Service with its repeaters. These and other easily obtainable services would not be displaced.

IV. SPECIFICATIONS

- a) FM, $\frac{1}{2}$ watt except 2 watts on channel 9.
- b) Automatic squelch; controls for channel selection off-on-volume.
- c) Button for 38 CTCSS tones. May be enabled or disabled.
- d) Monitor button. Used if CTCSS is enabled.
- e) Busy scan feature. May be enabled or disabled.
- f) Mobile and handheld models.
- g) MOBILE: If factory-installed, coupled to existing car antenna. If sold in aftermarket, coupler or separate antenna available. HANDHELD: Built-in antenna included. Capable of external antenna.
- h) Automatic transmitter identification ("ATI"). When radio is keyed, it sends its own distinctive code. This would be a deterrent to missusage.
- i) Available accessory to decode above ATI. REACT and other public service organizations interested in maintaining the integrity of the service would want to buy this in order to identify troublemakers. There would be a structure for handling missusage rather than the current extremes of being unconcerned or having vigilantes as in CB. The system would be similar to the "Official Observer" program in amateur radio.

- j) 1. A \$5 license fee collected at point of sale and mailed by seller to the F.C.C.
2. License application to be short and simple: name and address of buyer, verified by driver's license or other document. License to be good as long as buyer owns radio. (RADIO is licensed).
3. License application to be packed with radio and show ATI code. Last four digits will be radio owner's on-air identification.
- k) Frequencies: (All are transmit and receive except 9)
Channel MHZ.
1. 462.5625
 2. 462.5875
 3. 462.6125
 4. 462.6375
 5. 462.6625
 6. 462.6875
 7. 462.7125
 8. 462.6750 short-range emergency and assistance
 9. 467.6750 transmit, 462.6750 receive (repeater)
 10. 467.5625
 11. 467.5875
 12. 467.6125
 13. 467.6375
 14. 467.6625
 15. 467.6875
 16. 467.7125
- l) Channel 9 operates through a repeater - already operational on GMRS throughout many areas of the U.S., and is recognized as the emergency and assistance channel for long range.
- m) When radio is on ("awake"), channel 9 will be scanned for priority. A "Defeat" button will take it out of priority after ten seconds of pause on a received transmission on 9. It must be "defeated" for additional ten-second intervals as long as the listener does not want to hear the transmission on 9.
- n) When the radio is off ("asleep"), there is automatic turn-on if a signal is received on channel 9. After ten seconds it automatically turns off if not manually turned on.

V. CONCLUSION

The type of radio being proposed wouldn't need a lot of development. We're already using a low-power handheld on the new Family Radio Service (FRS) frequencies which are the same as those being suggested except for channels 8 and 9. Performance has been good. With a little redesign for car use, a new "Driver's Radio Service" could be a prompt reality.

The safety aspect along should get the attention of some agency such as the National Highway Transportation Safety Administration, the U.S. Department of Transportation, the Federal Highway Administration, or others. The commercial aspect should be attractive to opportunistic companies.

Some new cars have GPS and a display that shows road maps. This satellite-based technology is great. But it appears we have skipped over a more basic and wide-spread need for a number of years. A "Driver's Radio Service" would be the answer.

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